



## Fact Sheet

# United States Navy

Public Affairs Office, Naval Weapons Station, Seal Beach, Calif., 90740-5000

## Installation Restoration Program

### Introduction

This fact sheet discusses the investigation of possible hazardous waste disposal or contamination at the U.S. Naval Weapons Station at Seal Beach, California.

The Department of the Navy is investigating past and present receipt, use, and disposal of hazardous substances on the Naval Weapons Station located between Seal Beach and Huntington Beach and bordered by Los Alamitos, Westminster, and the Pacific Ocean. The program is operated under the Department of Defense Installation Restoration Program -- following the guidelines of the U.S. Environmental Protection Agency's "Superfund" program as described in the **Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)** of 1980 and the **1986 Superfund Amendments and Reauthorization Act (SARA)**. The Installation Restoration Program is funded through the Defense Environmental Restoration Account (Federal facilities are not eligible for "Superfund" trust fund dollars).

The purpose of the **Installation Restoration Program (IRP)** at the Seal Beach Naval Weapons Station is to identify, assess, and remediate (clean up or control) contamination from past hazardous waste disposal operations and hazardous material spills at the 5,000 acre facility.

### History of Previous Investigations

The Navy has completed several studies in the Installation Restoration process at the Seal Beach facility. Currently, a **Remedial Investigation and Feasibility Study** are about to begin at the Weapons Station for four sites of greatest concern.

The Navy first began investigating potentially contaminated sites here in 1985 with an **Initial Assessment Study** or **Preliminary Assessment (PA)**. The study of historical records, aerial photographs, field inspections and interviews with Station employees was conducted by **Naval Energy and Environmental Support Activity (NEESA)**. Twenty-five potentially impacted

locations were identified with nine recommended for study. A **Site Inspection** was conducted at the nine locations from 1987 to 1990. Soil, sediment, groundwater, and surface water samples were assessed for releases at the Station. Four sites were recommended for study in the **Remedial Investigation and Feasibility Study**.

In 1989, a **Resource Conservation Recovery Act Facility Assessment** was conducted at the Station to evaluate the existence of **Solid Waste Management Units or SMWUs and Areas of Concern or AOCs**. Additionally, the assessment was to determine if there was a potential for release of chemicals from these locations. Sixty-nine solid waste management units and nine areas of concern were identified, many of which were considered to have had possible contaminant releases. Many of these locations overlap the locations found in the 1985 **Initial Assessment Study**.



**SITE 19** work moves forward as soil gas probes are installed in preparation for **RI/FS** field work at the former **Building 241 Disposal Pit**.



**SITE 7, the former station landfill as it looks today. In the background are homes across Edinger Boulevard. This site is immediately adjacent to the National Wildlife Refuge.**

In 1990, an addendum to the 1985 Initial Assessment Study recommended that seven locations originally recommended for no further action in the IAS be further investigated; that six locations originally recommended for no further action in the IAS be given no further action status; that eight locations identified in the RCRA facility assessment be further investigated; and that eight locations identified in the RCRA facility assessment be given no further action status.

Additional information on CERCLA and RCRA sites at the Naval Weapons Station may be found in table 2-2 of the **Community Relations Plan**. One additional area has been identified for study -- the **Research, Testing and Evaluation area (RT&E)** where the second stage booster for NASA's **Saturn** rocket was built between 1963 and 1974. A **Preliminary Assessment and Site Inspection** are currently underway and all activities on the 40-acre site will be merged into the formal matrix schedule.

## What We Look For

To ensure a complete study, the Navy investigates potential locations for a wide variety of contaminants. Some were generated during operations over the 50-year history of the facility, others may have been part of material disposed of on the Station. The list of potential contaminants varies from site to site and is listed in detail in the reports on file in the information repositories. A short list of potential contaminants on the entire facility would include metals such as lead and mercury, pesticides, PCBs, organics such as benzene and methyl chloride, inorganic compounds such as asbestos, and explosive by-products and related materials such as nitrates, picric acid, and otto fuel (propylene glycol dinitrate).

## Preliminary Results

There have been releases of hazardous substances, (pollutants or contaminants) either at or from the Seal Beach Naval Weapons Station into the environment. For the four sites included in the **Remedial Investigation & Feasibility Study**, previous findings from the Preliminary Assessment & Site Inspection are discussed with each site description. Some of the sites listed in the Initial Assessment Study and recommended for no further action have been selected for a Site Inspection and the results are not yet available.

There are four locations in the Remedial Investigation on the Naval Weapons Station: Site 1, the Wastewater Settling Pond; Site 7, the Station Landfill; Site 19, the Building 241 Disposal Pit; and Site 22, Oil Island.

### SITE 1 -- Wastewater Settling Pond

This site is located at the intersection of Case Road and Sixth Street. Liquid wastes from metal cleaning operations in Building 71 were disposed of in an unlined settling pond from 1945 to 1971. Wastes include metals, alkali, and acidic wastewater. During the 1988 Site Inspection, cadmium, Chromium, copper, iron, lead, manganese, nickel and zinc were detected above background levels in soil samples.

### SITE 7 -- Station Landfill

This site is located off Ninth Street between the railroad marshaling yard and the National Wildlife Refuge boundary. Between 1955 and 1973, at least three trenches, each about 80 feet wide by 300 feet long by about 10 feet deep, were excavated for the disposal of waste generated on the Station. Environmental engineers now believe the possibility exists for more than three trenches to have been dug for landfill purposes. The Remedial Investigation will more fully characterize the site (develop an understanding of what is there and how big it is).

The largest volume of waste reportedly consisted of empty and partially empty paint and solvent containers. Unsupervised disposal of nonstation material was reported at the site. As part of the 1988 Site Inspection fieldwork, six monitoring wells were installed along the perimeter of the landfill area. In all wells, groundwater analysis revealed concentrations of silver, chromium, and mercury exceeding federal and state maximum contaminant levels. Methylene chloride, toluene, chromium, copper, lead, mercury, nickel, silver, and zinc were detected above background levels in soil samples.

### SITE 19 -- Building 241 Disposal Pit

The site is located about 100 feet west of building 241 -- between the building and Seal Beach Boulevard (adjacent to McGaugh Elementary School and the U.S. Navy Housing). The disposal pit is estimated to be 20 feet wide by 20 feet long and about 6 feet deep. From about 1970 until 1976, paints, solvents, and metals generated in Building 241 were disposed of at the site. As part of the 1988 Site Inspection fieldwork, three wells were installed. Groundwater samples exceeded maximum contaminant level drinking water standards for cadmium and chromium. Metals detected in soil samples include cadmium, chromium, copper, lead, nickel, and zinc.



**SITE 19, the Building 241 disposal pit has three monitoring wells like the one seen here to allow samples of subsurface water to be collected.**

#### **SITE 22 -- Oil Island**

Built from fill, Site 22 is a 6.5-acre island in the National Wildlife Refuge. In 1954, six lagoons were created to hold drilling mud and cuttings from oil well construction. Cuttings included drilling fluids (alkaline oil emulsion), crude oil (complex hydrocarbons and phenols). Following well construction, the lagoons held wastewater from oil production operations. Four lagoons are about 40 feet long by 40 feet wide and 6 feet deep. The largest lagoon is 200 feet long by 40 feet wide, and 6 feet deep. The 1988 Site Inspection fieldwork soil samples from the lagoons and drain outlets which enter the Refuge found petroleum hydrocarbons in five of six lagoons which exceeded the State Water Resources Control Board total petroleum hydrocarbon (TPH) guidelines. Detected metals included arsenic, chromium, nickel, and zinc. The oil operations are not a Navy operation as the oil and gas rights under the 5,000-acre Station were not purchased by the U.S. Government in the 1940s, a private corporation operates the oil production equipment on oil island under lease to the holder of the energy rights.

## **Resource Conservation and Recovery Act**

The Resource Conservation and Recovery Act (RCRA) of 1974 deals with present day receipt, use, and disposal of hazardous materials. The long term goal of the Act is to reduce or eliminate the need for hazardous or toxic substances. Because many industrial process still require the use of materials which must be specially handled when no longer of use to the Navy, the Naval Weapons Station has obtained a permit to store hazardous waste under Federal and State hazardous waste laws. The permit-

ted storage facility is subject to regular inspection by the California Environmental Protection Agency's Department of Toxic Substances Control -- Surveillance and Enforcement Branch. There is no treatment of hazardous waste at the Naval Weapons Station.

The Navy works with State and Federal regulatory agencies to ensure current practices are in compliance with existing law. On August 1, 1992, the State of California was authorized by the U.S. Environmental Protection Agency to implement the Federal RCRA program. The California Environmental Protection Agency's Department of Toxic Substances Control is the State agency responsible for implementing both State and Federal hazardous waste programs.

While some sites are impacted by the 1989 RCRA facility assessment, current operating sites using hazardous substances covered by the RCRA are not the subject of this fact sheet. For additional information about the RCRA permit, please contact the Naval Weapons Station Public Affairs Officer listed on page 8 of this fact sheet.

## **Underground Fuel Tank Removal Program**

The Seal Beach Naval Weapons Station has a program to inspect, remove, and or replace all underground tanks on the Station. This program is not a part of the **Installation Restoration Program**, but is required by the **Resource Conservation and Recovery Act**. To date, 34 tanks have been removed, none replaced, and only four locations were found where the tanks leaked. Six additional tanks were tested and found not to have leaked. They will be replaced in the future in accordance with underground tank regulations.

## **Water Quality**

In the summer of 1993, the Orange County Water District installed a 2,000-foot deep monitoring well to sample water in 10 discrete zones of the watershed area under the Naval Weapons Station. This is part of a comprehensive program to monitor water quality throughout the water district's area of responsibility. It is not related to any of the environmental investigations or restoration programs on the facility.

## **Federal Facility Site Remediation Agreement**

The U.S. Navy, the State of California Environmental Protection Agency's Santa Ana Regional Water Quality Control Board and Department of Toxic Substances Control have entered into an agreement to cooperate in accelerating and streamlining the remediation (cleanup or control) process at the



Seal Beach Naval Weapons Station. The September 1991 **Federal Facility Site Remediation Agreement (FFSRA)** is a formal agreement which defines roles and responsibilities of State and Federal agencies, integrates overlapping CERCLA, RCRA, and State requirements, and establishes a process to resolve any disputes which may arise during the study and execution phase of the IR program.

The U.S. Navy is the lead Federal agency and the **California Environmental Protection Agency's Department of Toxic Substances Control** is the lead State agency for the investigation and remediation of the Seal Beach Naval Weapons Station.



**SITE 22, Oil Island is within the National Wildlife Refuge and can be seen from the Pacific Coast Highway.**

## Federal Law

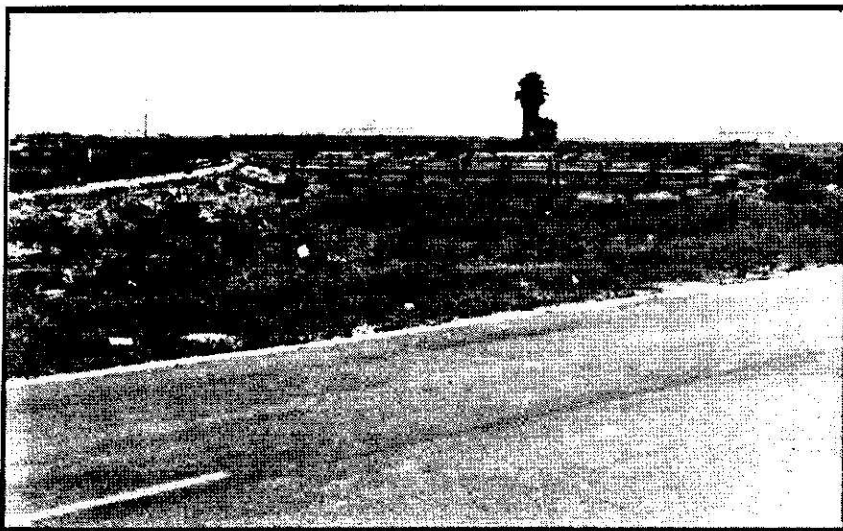
In 1980, Congress passed the **Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)**, commonly called **Superfund**. CERCLA was reauthorized and amended on October 17, 1986, by the **Superfund Amendments and Reauthorization Act (SARA)**. SARA provides the Environmental Protection Agency with new authorities and tools that strengthen the enforcement program -- including releases of hazardous substances at Federal facilities. SARA declared that Federal agencies, like the Naval Weapons Station at Seal Beach, must comply with Superfund and its requirements.

SARA clearly defines the process Federal agencies must follow in undertaking remedial responses and further permitted applicable state laws concerning the removal and remedial actions apply to federal facilities which are not listed on the **National Priorities List (NPL)**. The Seal Beach Naval Weapons Station is not an NPL site.

## State Law

The California Health and Safety Code and the California Water Code have sections applicable to the Federal Facility at Seal Beach. Although the **California Environmental Quality Act (CEQA)** does not apply to the U.S. Naval Weapons Station, the Navy recognizes the Department of Toxic Substances Control's requirement to comply with the State law and assists the agency in meeting those obligations. Additionally, the daily operation and remediation programs at the Weapons Station are affected by the **South Coast Air Quality Management District's** implementation of the 1990 Clean Air Act and the State of California's implementation of Proposition 65, the Safe Drinking Water and Toxic Enforcement Act.

## Community Participation



**SITE 1, the wastewater settling pond is adjacent to the most inland portion of the National Wildlife Refuge.**

Representatives of the Station have made presentations in the communities surrounding the Seal Beach facility. In 1988, representatives of the Station interviewed members of the community while gathering data to develop the **Community Relations Plan (CRP)**. In 1992, Station representatives and Public Participation specialists from the California Environmental Protection Agency again interviewed local residents, community leaders, and professionals representing surrounding cities while developing a revised Community Relations Plan. The Community Assessment is very helpful in developing an idea of community concerns prior to entering the RI/FS work at the facility. Community concerns are discussed in the **Community Relations Plan**, which will be available to the public at the information repositories identified in this fact sheet (in October).

A **Technical Review Committee (TRC)** has been established, held meetings, and will continue to hold meetings in the future to review documents pertaining to the Installation Restoration Program at Seal Beach. The TRC maintains a dialogue with technically knowledgeable people to help ensure that environmental concerns with the studies and cleanup recommendations have been addressed. A list of TRC members is available in the Community Relations Plan. It includes representatives from state and local regulatory agencies, the City of Seal Beach, the City of Huntington Beach, interested professional members of the community, and the Navy. The TRC meets as needed to discuss project progress, review reports, and comment on the IR program.

Documents have been placed in the information repositories to enable the public to review the progress at the Weapons Station. Three information repositories have been established -- the Seal Beach Public Library on Electric Avenue, the Los Alamitos-Rossmore Branch Library on Montecito Road in Seal Beach or the Huntington Beach Public Library on Talbert Street in Huntington Beach (address and telephone numbers are listed on the page 7). Because of the recent reduction in hours at community libraries, an additional copy of documents under review will be available during the comment period at the City of Seal Beach City Clerk's Office.

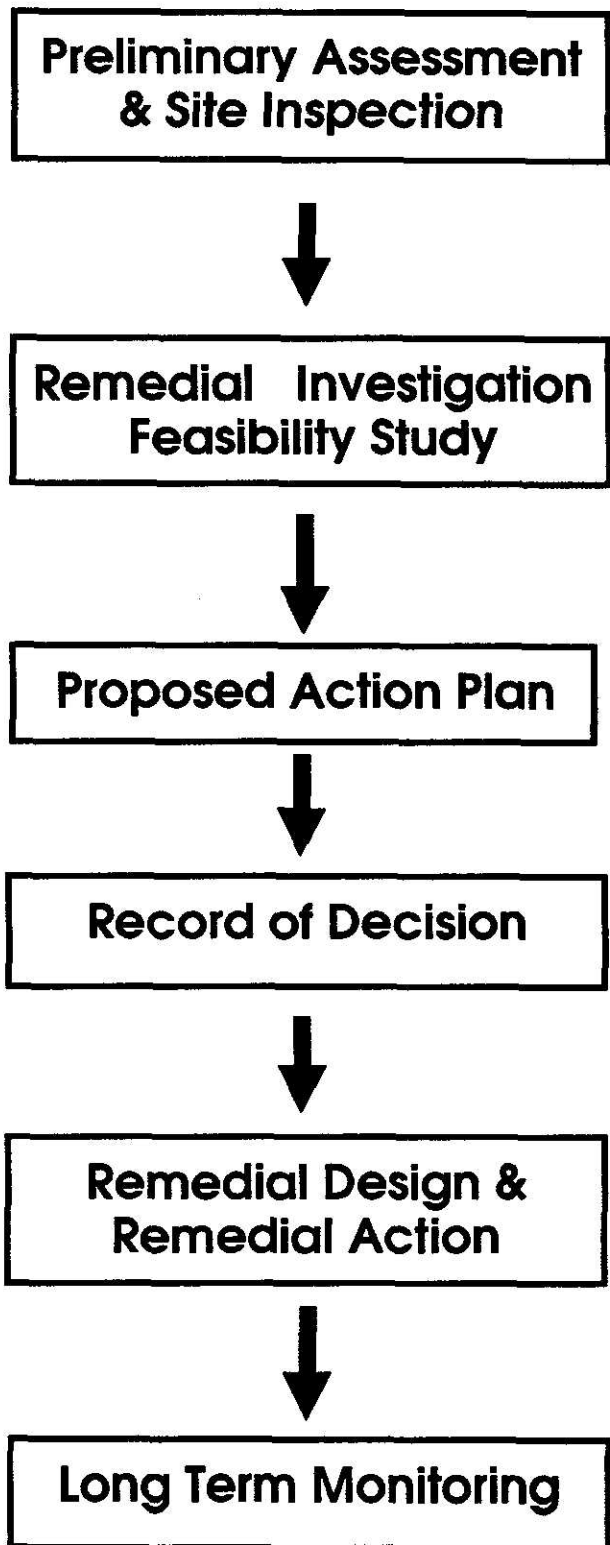
## **The Naval Weapons Station at Seal Beach**

The Seal Beach Naval Weapons Station is a major command of the Naval Sea Systems Command. It is responsible for ordnance support to more than two-thirds of the naval combatant ships in the Pacific and operates facilities in Seal Beach, Fallbrook, Pomona, and Norco, Calif., and on Indian Island at Port Hadlock, Wash.

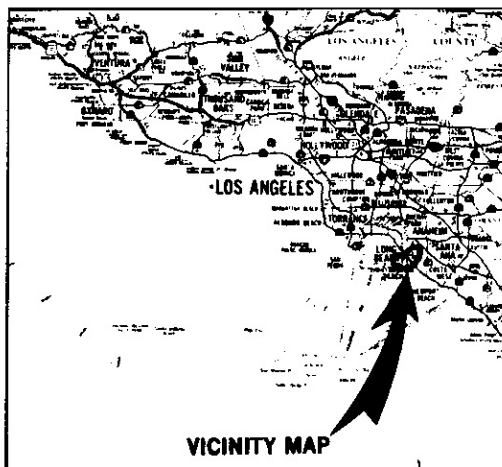
The Naval Weapons Station was established as the U.S. Naval Ammunition and Net Depot at Seal Beach on March 21, 1944. The 5,000-acre installation was redesignated as a Naval Weapons Station in 1962, the same year that NASA, the National Aeronautics and Space Administration, began construction of a facility to build the Saturn S-II rocket stage in cooperation with North American Aviation (now Rockwell). In 1972, the Seal Beach National Wildlife Refuge was established on approximately 1,000 acres of Weapons Station land, and in 1973, the Saturn Rocket program was terminated.

Today, the Naval Weapons Station provides receipt, storage and issue of ordnance for the Navy and Marine Corps; performs intermediate-level maintenance (to the section or major sub-assembly) on the *Standard* surface-to-air missile; and performs depot-level maintenance (to the component) on *Standard* and other weapons systems.

# ***The Installation Restoration process***



Map Removed as per Navy World Wide Web Security Regulations



Site Location Map for RI/FS work at Seal Beach Naval Weapons Station. This map is taken from the Site Management Plan for the RI/FS.

# Installation Restoration Program - the Process

The Department of the Navy conducts a number of industrial processing and manufacturing operations which use industrial chemicals. Although wastes from these operations were disposed of in the past through commonly accepted practices of the time, the Defense Department has found that such practices at military installations across the country may have resulted in significant risks to public health and the environment. The IRP process is the military equivalent to the Superfund program.

The Installation Restoration Program process begins with a **Preliminary Assessment and Site Investigation (PA/SI)**. (SEE FLOW CHART ON PAGE 5) In this step, all available data is gathered and reviewed to identify possible sites of study. Then, surface water, groundwater, and soil samples are taken at identified sites to decide if additional study is warranted. Sometimes monitoring wells are installed during this phase. The Site Inspection information is used to score the site using the **Hazard Ranking System** to determine whether response action is needed.

If additional study is required, a **Remedial Investigation and Feasibility Study (RI/FS)** will be conducted. This phase typically consists of taking soil and water samples and drilling monitoring wells. Samples are shipped to State and Federal EPA certified labs for testing in accordance with the sampling plan approved by the regulatory agencies. The data gathered in the RI will help determine the need to take action. If remediation is re-

quired, a **Feasibility Study** will evaluate possible alternatives and their suitability -- the most effective way to remediate a site.

Based on the findings of the Feasibility Study, a **Proposed Action Plan** will be developed for public comment, summarizing the preferred cleanup strategy, rationale for the preference, and alternatives presented in the detailed analysis of the RI/FS. A **Record of Decision (ROD)** will document which remediation alternative was selected and address public comments and community concerns, and a **Remedial Design and Remedial Action (RD/RA)** phase will include the engineering and implementation of the proposed alternative for the site.

Finally, **Long Term Monitoring** of sites may be required based upon data collected and decisions made at earlier decision points in the process.

## Administrative Note

Although this fact sheet is numbered "1," earlier information brochures were produced since the first Community Relations Plan was released in July 1988; however, this is the first fact sheet to be developed in accordance with the Federal Facility Site Remediation Agreement between the State of California and the Navy. The Navy will continue to produce fact sheets and other material to inform the public of site conditions, proposed activities, and public opportunities to participate in the process. An updated CRP has been written and is now in use to meet the needs of the affected community and regulatory changes since 1988.

## Where You Can Get More Information

Copies of documents and correspondence relating to the Installation Restoration Program are on file and can be reviewed in the information repositories listed below.

**Seal Beach Public Library**  
Mary Wilson Branch  
707 Electric Avenue  
Seal Beach, CA 90740  
(310) 431-3584

**Huntington Beach Public Library**  
7111 Talbert Avenue  
Huntington Beach, CA 92648  
(714) 842-4481

**Naval Weapons Station Seal Beach**  
(Employee & Residents Only)  
Public Affairs Office, Building 204  
Naval Weapons Station  
Seal Beach, CA 90740-5000

**Los Alamitos / Rossmoor Branch Library**  
12700 Montecito Road  
Seal Beach, CA 90740  
(310) 430-1048

If you have questions or comments, would like to be placed on the mailing list to receive fact sheets and other information, or would like a presentation made to your group, club, or organization, please contact:

**Richard Williamson**  
Public Affairs Office  
Naval Weapons Station  
800 Seal Beach Boulevard  
Seal Beach, CA 90740-5000  
(310) 594-7214/5

**Claire Best**  
Public Participation Branch  
California Environmental Protection Agency  
Department of Toxic Substances Control  
245 W. Broadway, Suite 350  
Long Beach, CA 90820-4444  
(310) 590-4949



If you wish to be placed on the mailing list for future information and fact sheets, please complete the following and mail to the Naval Weapons Station Public Affairs Office.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**Public Affairs Office  
Naval Weapons Station  
800 Seal Beach Boulevard  
Seal Beach, CA 90740-5000**

Place  
Postage  
Here

**Public Affairs Office  
Naval Weapons Station  
800 Seal Beach Boulevard  
Seal Beach, CA 90740-5000**



# Community Questionnaire

One of the main purposes of this Fact Sheet is to help the Navy and the California Department of Toxic Substances Control determine the level of interest in and need for public meetings and workshops on other aspects of the Seal Beach Naval Weapons Station site. Please take a moment to answer this questionnaire, noting any concerns or questions you might have.

1. Has this Fact Sheet answered your questions regarding the status and scope of remediation activities at the Seal Beach Naval Weapons Station site?

- ☐ Yes
- ☐ No

2. If not, what additional information would you like to have and in what form would you like to receive it?

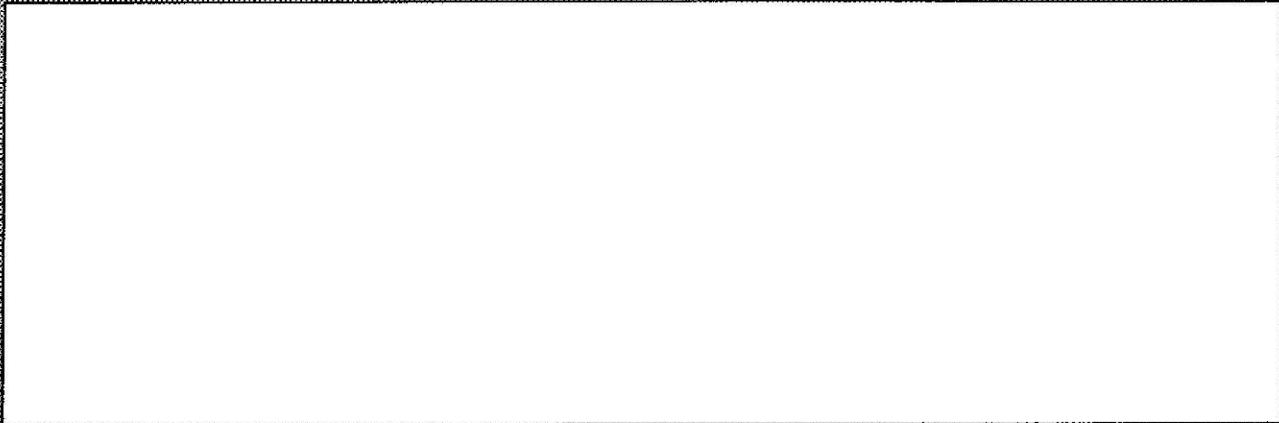
- ☐ Fact Sheets
- ☐ Correspondence
- ☐ Workshops
- ☐ Community Meetings

3. In general, what is the best day of the week, the best time, and the best location for you to attend a public meeting?

- |                                    |                                    |   |
|------------------------------------|------------------------------------|---|
| <input type="checkbox"/> Monday    | <input type="checkbox"/> Morning   | <input type="checkbox"/> City of Seal Beach<br>City Hall<br>211 Eighth Street<br>Seal Beach, Calif., 90740            |
| <input type="checkbox"/> Tuesday   |                                    |   |
| <input type="checkbox"/> Wednesday | <input type="checkbox"/> Afternoon | <input type="checkbox"/> City of Huntington Beach<br>City Hall<br>2000 Main Street<br>Huntington Beach, Calif., 92648 |
| <input type="checkbox"/> Thursday  | <input type="checkbox"/> Evening   | <input type="checkbox"/> Huntington Harbor Yacht Club<br>3821 Warner Ave.<br>Huntington Beach, Calif., 92649          |
| <input type="checkbox"/> Friday    |                                    | <input type="checkbox"/> City of Westminster<br>City Hall<br>8200 Westminster Blvd.<br>Westminster, Calif., 92683     |
|                                    |                                    | <input type="checkbox"/> Other _____<br>_____<br>_____<br>_____   |

4. Do you have any additional comments or concerns?

**Public Affairs Office  
Naval Weapons Station  
800 Seal Beach Boulevard  
Seal Beach, CA 90740-5000**



# **Notice of Public Meeting**

## **Remedial Investigation begins at the Seal Beach Naval Weapons Station**

A public meeting has been scheduled to provide more information about the environmental Installation Restoration Program at the Seal Beach Naval Weapons Station, and provide you an opportunity to ask questions or share your concerns.

**Wednesday, September 29, 1993**

**7:00 p.m.**

**City of Seal Beach Council Chambers**

**211 8th Street**

**Seal Beach, CA**

For more information regarding the public meeting, please contact Richard Williamson or Bernadette Perez in the Public Affairs Office at the Seal Beach Naval Weapons Station (310) 594-7214/5 or Claire Best, Public Participation Branch of the California Environmental Protection Agency's Department of Toxic Substances Control (310) 590-4949.